erations may improve or stabilize vision in diabetic patients with other severe eye complications; however, careful consideration must be given because of a high incidence of surgical complications.

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Extended Wear Contact Lenses

EXTENDED WEAR CONTACT LENSES are soft contact lenses that can be worn continuously for weeks to months. They offer the same optical advantages as conventional contact lenses but are removed only for cleaning. If a complication occurs, however, they can be easily taken out, which is a distinct advantage over intraocular lenses. The Cooper Permalens, Hydrocurve and Hyer-Schulte Sauflon lenses are approved for aphakia, and the Hydrocurve II-55 and Permalens are approved for myopic (near-sighted) extended wear.

Extended wear lenses are indicated only for those patients who cannot wear conventional contact lenses (hard or soft) or thick cataract glasses. Patients who are unable to insert or remove conventional contact lenses or who cannot adjust to glasses may be considered candidates for extended wear lenses. However, patients with tear deficiencies or chronic eyelid infections who are prone to complications should not wear these lenses.

Compared with conventional soft lenses, extended wear contact lenses are more successful because they transmit more oxygen to the cornea due to a higher water content or a thinner lens design. The success rate for myopic and aphakic patients wearing these lenses has been reported to be more than 90 percent and 70 percent, respectively. Ninety percent of myopic and 78 percent of postcataract patients achieve a vision of 20/30 or better.

The most common complications have been lens deposits, lens breakage and loss, corneal edema and neovascularization. Corneal infections have been a rare problem.

To minimize such complications, patients are instructed to see their ophthalmologist if pain, redness or decreased vision occurs.

In the future, we can expect high-oxygen permeable lenses, such as those made of silicone or cellulous acetate butyrate, to produce a higher success rate, fewer complications and better levels of visual acuity.

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Orthokeratology

ORTHOKERATOLOGY IS AN optometric procedure in which patients are specially fitted with hard contact lenses to induce a flattening in the corneal curvature and thereby reduce myopia (near-sightedness). After four to six weeks new, flatter lenses are fitted to further the flattening process. Lenses are refitted in the same manner for 18 to 30 months until the patient's near-sightedness has been eliminated or until no further changes can be induced.

Orthokeratologists, representing a small minority of optometrists, claim the procedure is capable of correcting certain amounts of near-sightedness and that when contact lenses are finally removed, the visual acuity will be improved. They also claim that the procedure has a scientific basis, is predictable and has few complications. Although many patients are required to wear "retainer" contact lenses, designed to maintain the induced changes, orthokeratologists state that patients can go without contact lenses for days to weeks without a regression of their visual acuity.

Two scientific studies have not substantiated the orthokeratologists' claims. Both have shown the following: (1) the procedure does not have a scientific basis and is not predictable, (2) the amount of myopia which can be corrected is less than 2 diopters, (3) stabilization requires more than 20 months to achieve, and when the contact lenses are removed, the corneas return to their former shape and visual acuity returns to previous levels and, most important, (4) the patient's best possible unaided visual acuity does not always return immediately on removal of the contact lenses. In some patients the lenses have to be removed for 12 to 36 hours to achieve any improvement in unaided visual acuity. Futhermore, the quality of the visual acuity without the contact lenses is less than that with glasses or standard contact lenses. For example, some patients stated

that their vision was distorted—as though they were looking through a dirty windshield or a fish bowl. Based on a short-term evaluation, both studies concluded that the procedure has no permanent risks to the cornea but that it also has nothing to offer a patient.

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Lacrimal Repair

THE PERMANENT PROBLEM of tearing secondary to damage to the lacrimal excretory system is unnecessary because of advances in techniques of surgical repair. Previously, traumatic or congenital disruption of the lacrimal canaliculi was generally considered nonrepairable. Older methods of repair, using a steel rod or a "pigtail probe," often caused considerable discomfort to the patient and damage to fragile tissues.

The use of indwelling soft silicone tubing, as advocated by Quickert, combined with microsurgical direct anastomosis has improved the prognosis for functional healing. These soft tubes are passed through the upper and lower canaliculi, lacrimal sac and lacrimal duct and are fastened where the lacrimal duct exits on the lateral nasal wall. Jones and associates have demonstrated that tears may flow through either the upper or lower canaliculus and, in some persons, the flow may be better through the upper passage. Thus, ophthalmologists now tend to repair a laceration of either canaliculus with the long-term indwelling tubes.

The newer Guibor model is easier to insert because the tubing is swaged onto a metallic probe. The tubes are tolerated for extended periods while a permanent fistula forms and are easily withdrawn from the nose when no longer needed. Often the patient is unaware of tearing while the tube is in place because the tears pass along the outside surface of the silicone tubing. The use of microscopy to locate the vestigial tract or the severed end of the canaliculus and also to facilitate surgical repair has greatly enhanced the success rate.

The silicone tubes are also used in selected cases of chronic tearing which otherwise would need more extensive surgical repair such as a dacryocystorhinostomy. The distinct advantage of the former technique is that the patient does not require a permanent prosthetic device since the silicone tubing is removed when no longer needed.

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Iridology

ALMOST A CENTURY has passed since Ignatz Peczely, an obscure Hungarian physician, enunciated basic principles of physical diagnosis by examination of minute surface topography of the iris. In spite of the manifest absurdity of the conclusions drawn from such examinations, the cult of "oculodiagnosticians" flourished thereafter, particularly in Central Europe. Early in this century, iridiagnosis (later iridology) was introduced in the United States, and it has been with us ever since. It is now primarily, though not exclusively, within the domain of a small but growing group of chiropractors. Magazine articles, television programs and newspaper advertisements have heightened public awareness of the availability of this supposed diagnostic method. An attempt to achieve further respectability for iridology has been made by wrapping it in the mantle of holistic health.

For an iridologist, every organ of the body is represented on an iris chart that is superimposed on a patient's iris like a template before interpretation. Not all iris charts are the same. Practitioners appear free to modify their charts at will. It is disconcerting to realize that one iridologist's scrotum might be another's scapula. Every fleck, spot, color variation, elevation and depression, all real or imagined, is presumed to have diagnostic significance. *Modern* iridology employs an anterior segment camera. An enlarged color photo of the iris is obtained for analysis. The descriptions and interpretations accompanying such photos indicate to this writer that an active imagination is an essential prerequisite for the practice of iridology.

It is not difficult to refute the tenets of this pseudoscience and the diagnostic conclusions it attempts to draw. The iridologist makes no allowances for stabilization of pupillary size, changes that may alter iris topography significantly. Similarly, a diseased iris is not recognized as such. Instead, the abnormal changes are interpreted as bodily disorders. It is unsettling to reflect that, according to iridology's precepts, some cases of